

Delays in Management of Post Partum Psychosis in Third World Countries; A Case Report and Literature Review

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Abstract

This case report describes a case of postpartum psychosis with delay in seeking consultant psychiatric care despite presence of severe psychiatric illness in the family, poor socioeconomic status, and birth of a female baby to primipara mother. We propose that puerperal psychosis might occur in late post-partum period also i.e. after 4 weeks of delivery. Increased awareness on post-partum issues in lower socio-economic groups can significantly improve the outcome of such patients.

Key words: Post-partum psychosis, Early Management.

Introduction

Postpartum psychosis has been reported to have a prevalence of 1 to 2 cases per 1000 child births^{1,2} and this

prevalence does not appear to differ in various cultures.² This goes up to almost 10% in women who are hospitalized for psychiatric morbidity before delivery.³ Rates of developing further psychiatric illnesses have been reported to be very high (75%) in women admitted to a psychiatric hospital within 6 months of childbirth.⁴ Almost 90% of all postpartum psychotic episodes tend to occur within the first 4 weeks after delivery.³

The risk of puerperal psychiatric illness is about 29% in subsequent pregnancies.⁴ However, almost 50% of women presenting with postpartum psychosis are without any previous history of psychiatric admissions in hospitals.⁵ A positive correlation also exists between the birth of female children and psychosis.⁶

Puerperal psychosis is usually preceded by certain prodromal signs, which must be recognized early to enable better management of women with puerperal psychosis.⁷ However, in third world countries like Pakistan, delay in seeking psychiatric consultation after developing puerperal psychosis is still common with patients presenting after weeks of full blown psychosis to psychiatric institutions. Our case report discusses this problem and suggests some solutions.

Case Presentation

Mrs. A is a 23 year old house wife admitted to the Psychiatry ward with complaints of aggressive and agitated behavior, a history of verbally and physically

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abusing her family, spontaneous weeping spells, conversing with the demons she was seeing along with decreased sleep and appetite for two weeks prior to admission. These complaints later progressed to postural rigidity, poor oral intake, lack of volition, affective flattening, muteness, motoric immobility, catalepsy (including waxy flexibility) and stupor one week prior to admission. She had undergone spontaneous vaginal delivery (involving episiotomy) of a full term baby girl at a local obstetric clinic a month before developing these symptoms. She had remained well for one month after child birth. With the development of the symptoms, she withdrew completely from the baby.

The patient was taken to a local hospital one week after the onset of her symptoms, and then referred to the Psychiatry department of Mayo Hospital, Lahore for electroconvulsive therapy. She has no history of depressive, manic or mixed episodes or suicide attempts. She has no history of substance abuse. Her father is alive and healthy. Her mother developed identical symptoms at the age of 22 (following the birth of the patient). She was treated for Schizophrenic illness and died after 5 years at the age of 27. Mrs. A has a sister who is healthy with no psychiatric issues. She belongs to a poor family and had no schooling. She married a year ago.

On examination, Mrs. A is a thin lean lady lying in bed, her height is 140 cm and her weight is 42 kg (BMI 21.43 kg/m²). Her vital signs are normal. She was not oriented to time, place or person and was completely mute. Her posture was rigid and waxy flexibility was present. Hygiene was poor with no self care. She had no focal neurological deficits.

Plain CT scan (without contrast) was normal. Chest X ray, total & differential white cell counts, liver function tests (Serum Alkaline Phosphatase = 233 U/L; Serum SGPT = 28 U/L, Serum SGOT = 32 U/L), renal function tests (Serum Urea = 34 mg/dL; Serum Creatinine 0.9 mg/dL), serum electrolytes (Na⁺ 139 mEq/dL; K⁺ 3.7 mEq/dL) and Vitamin B₁₂ levels (T = 320 U/L; C = 180-900 U/L) were all in the normal range at the time of admission. Red blood cell profile showed moderate iron deficiency anemia.

Prior to admission, Mrs. A had not been taking any medications, oral or in depot form. Vaccinations were not completed according to WHO schedule after birth of Mrs. A. No known drug allergy were reported by Mrs. A's relatives.

Mrs. A was started on Risperidone 1 mg given orally twice daily for psychosis. Metronidazole 400mg orally thrice daily for 5 days was recommended by the

medical team since she was catheterized and at high risk of urinary tract infection. Given her severe symptoms and catatonia, Electroconvulsive therapy (ECT) was started twice weekly. While catatonic she was given one liter of 5% Dextrose Saline infusion daily along with one liter of Ringer lactate to prevent dehydration.

Four days after admission, Mrs. A became febrile due to iatrogenic (catheter induced) urinary tract infection by *E. coli*, which was confirmed by increased white blood cell counts, complete urine examination and urine culture sensitivity. Her urine culture grew *E. Coli* sensitive to Amikacin, so 1 g of Amikacin injections were given intra-muscularly once daily for 7 days. Breast tenderness along with discharge of pus from areola also developed on right side but no medications were given as she was already receiving Amikacin Injections that cover *Staphylococcus aureus*. High vaginal swabs showed no growth on culture.

She received a total of 9 ECT treatments and her Risperidone 2 mg/day was continued. Catatonia resolved after 3-4 ECTs and her oral intake improved. She would be much improved immediately after the ECT treatment and would gradually become more withdrawn on the subsequent days with features suggestive of Depression. During the second week of admission, Fluoxetine 20 mg a day was added to her medication regimen to treat presumptive depression. Her mood gradually improved, her oral intake became better, she started talking and became more interactive. After 9 ECT treatments, she was back to her baseline. Her catatonia, mutism, motoric immobility, lack of volition, poor oral intake and other presenting symptoms had either resolved or greatly abated. She was discharged home for outpatient follow up on a combination of Fluoxetine 20 mg a day and Risperidone 2 mg a day. At the time of discharge she was walking, talking and eating normally and had no residual signs of psychosis.

Discussion

Mrs. A presented with typical symptoms of post-partum psychosis involving disorganized / catatonic behavior along with speech disturbances (in her case, mutism) and hallucinations. Disorganized behavior is observed in about 75% of cases presenting with post-partum psychosis and speech disturbances in 45%.⁸

A study of Post-partum Psychosis in an African population reports 23.6 years to be the mean age of onset, with the majority being primiparous women.⁹

Organic psychosis developed in four fifths of the patients and schizophrenia in 8.1%.⁹ Mrs. A has age of 23 years, and therefore is in high risk group, and this was her first pregnancy in line with higher rates of development of post-partum psychosis in primiparous women.

Almost 90% of postpartum psychotic episodes tend to occur within the first 4 weeks after delivery.³ However, Mrs. A had no symptoms until one month after child birth. This underlines the need for ongoing follow up of new mothers beyond the first month post-partum.

A family history of bipolar affective illness, ongoing stressors (family, marital, financial etc) and an unplanned pregnancy may also be risk factors for developing pregnancy – related psychosis.¹¹ Mrs. A has a family history positive for psychotic disorders including an identical episode in her mother at almost exactly the same age. This history should make clinicians very alert about monitoring the patient for an extended time (at least 6 months) after delivery.

Birth of female children is also positively correlated with development of post-partum psychosis.^{6,10} In third world countries like Pakistan, birth of baby girls is considered inauspicious especially in families of lower socioeconomic status. Mothers who give birth to girls may be neglected and may not receive adequate nutritional support, family help or medical care leading to a higher risk of post partum morbidity.

Despite a multitude of risk factors pointing towards a high probability of post-partum psychosis, lack of psychiatric follow-up after delivery puts many mothers like Mrs. A at high risk. Lack of awareness of psychiatric symptoms in post-partum period among families also causes unnecessary delays in seeking psychiatric consultation. Early management of women who present with prodromal signs of puerperal psychosis can lead to earlier diagnosis, treatment and a much better prognosis. In this case, Mrs. A's family checked her into a psychiatric facility one week after she developed psychotic symptoms and her illness remitted completely after appropriate treatment. The need for early diagnosis before psychosis becomes florid remains a prime goal in countries like Pakistan.

Conclusion

Despite improvements in awareness regarding psychiatric symptoms that develop after delivery, there is still

lack of awareness in lower socioeconomic classes of third world countries and consequently, delay in management of such patients. Mothers with multiple risk factors for subsequent development of psychiatric illness should be identified at the time of delivery and provided regular follow up and treatment in the post-partum period.

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